

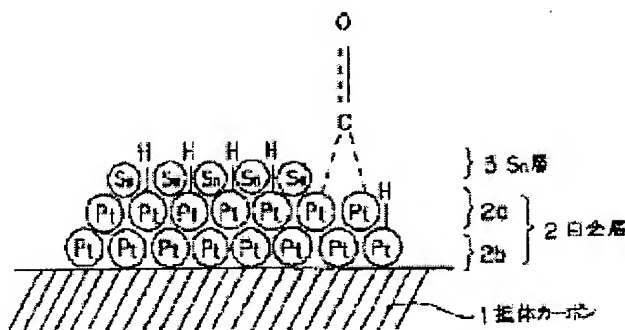
**FUEL CELL ELECTRODE AND ITS MANUFACTURE**

**Patent number:** JP8022827  
**Publication date:** 1996-01-23  
**Inventor:** MAOKA TADANORI  
**Applicant:** TOSHIBA CORP  
**Classification:**  
- **international:** H01M4/86; H01M4/88; H01M8/02  
- **europaean:**  
**Application number:** JP19940155571 19940707  
**Priority number(s):**

**Abstract of JP8022827**

**PURPOSE:** To provide a fuel cell electrode having a large reaction surface area, high resistance to various impurities in fuel gas, and an excellent catalytic function.

**CONSTITUTION:** A carbon supported platinum catalyst is kneaded with a fluoro- binding agent, is then applied onto a conductive porous gas, and baked to form a porous gas diffusion electrode. Next, the porous gas diffusion electrode is immersed for about one hour in a solution obtained by the dissolving of 2%, SnCl<sub>4</sub> and an excess amount of sodium formate in one mol of H<sub>3</sub>PO<sub>4</sub>, and the electrode is dried and completed. A catalyst layer comprises a support carbon 1, platinum layers 2 supported by the carbon 1, and Sn layers 3 formed on the surface of the platinum layers 2 as base metal element layers. In this case, a plurality of platinum layers 2 are formed with fine particles as units, and a single or plural Sn layers 3 are formed with fine particles as units.



Data supplied from the esp@cenet database - Patent Abstracts of Japan